Setup Guide

HP Wireless Print Server wp110

Setup Guide

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introducing the HP Wireless Print Server wp110

what's in the box

Thank you for buying an HP Wireless Print Server! Your print server box contains the following items:

- HP Wireless Print Server wp110
- AC/DC power adapter with cord
- *HP Wireless Print Server wp110 Setup Guide*
- HP Wireless Print Server wp110 CD-ROM

The CD-ROM contains Windows installation software and Macintosh configuration utilities as well as the *Setup Guide* and *Configuration Guide* for the print server.

If any of these items are missing from your box, contact your HP dealer or HP Customer Care (see page 11 for more information).

what you need to supply

- computer with 802.11b WLAN compliant network interface card installed
- IEEE 1284 compliant printer cable
- access point (required for infrastructure mode only)

customer information in the configuration guide

See the *Configuration Guide* on the CD-ROM for:

- advanced configuration procedures
- product specifications
- declaration of conformity
- environmental statement
- warranty statement
- WLAN concepts

about this guide

This guide is for network users and administrators who have a working knowledge of the following:

- wireless LAN technology
- print server technology
- the operating system(s) running on the computer(s) being configured to use the print server

terms

The HP Wireless Print Server wp110 is referred to as the *print server* in this guide.

This guide uses *ad hoc mode* and *infrastructure mode* to refer to the Windows operating modes. The terms *computer-to-computer* and *AirPort Network* refer to Macintosh operating modes.

Other terms you may find associated with ad hoc mode are *peer-to-peer* or *independent basic service set (IBSS). Networking, enterprise,* or *star topology* are sometimes used for infrastructure mode.

WLAN is the acronym for wireless local area network.

acknowledgements

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product

This manual is for use with the **HP Wireless Print Server wp110**, product number J6062A.

safety compliance

The **HP Wireless Print Server wp110** complies with EN60950:

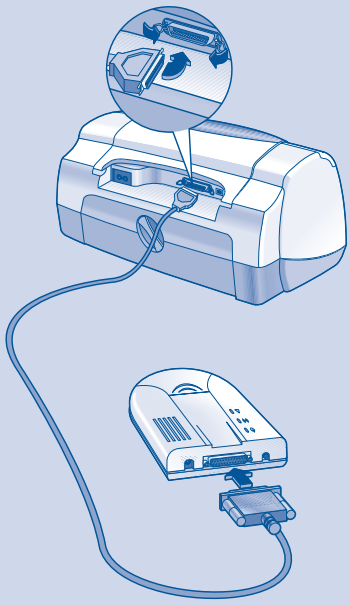
EN60950 1992 +A1,A2,A3,A4,A11

connecting the print server

Before you begin, verify that you have an appropriate IEEE 1284 compliant parallel printer cable to connect the print server to the printer.

1 connect the parallel cable

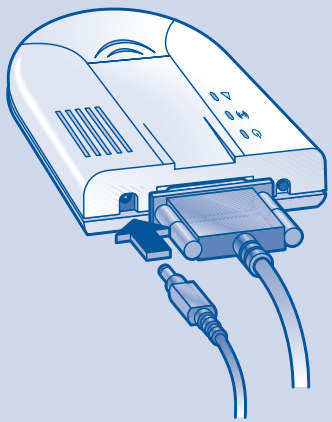
1. Turn off the printer.
2. Connect the appropriate IEEE 1284 compliant parallel printer cable to the printer and the print server.
3. Turn on the printer.



2 plug in the power cord

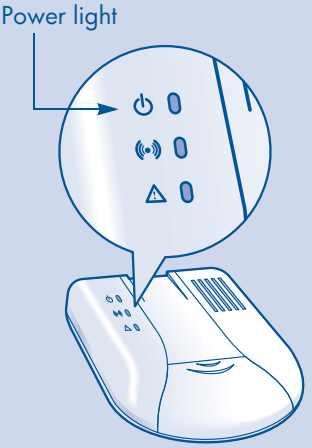
1. Plug the small end of the power cord into the print server.
2. Plug the conventional end of the power cord into the power source.

Note The print server does not have a power switch. It automatically turns on when the power cord is connected to a power source.



3 monitor the LEDs

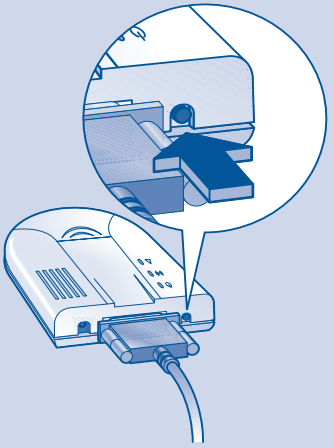
1. Wait until the print server cycles through the start-up sequence and only the **Power** light remains lit.
2. Allow at least 10 seconds for the print server to retrieve information from the printer.



4 print a configuration page

1. Press and hold the **Test** button on the back of the print server until the **Power** and **Status** lights begin blinking. A Print Server Configuration Page is printed.
2. Save this page for reference. You will need it to configure the print server.

Note Printing a Print Server Configuration Page verifies communication between the print server and the printer. This page also provides important information about the print server, its settings, and its current status (see page 12 for more information).



configuring the print server

This section provides the basic steps required to configure the print server. For more detailed instructions, see the *Configuration Guide* on the CD-ROM.

Before you begin, verify that:

- the computer uses a supported operating system. The print server supports:
  - Windows 98, NT 4.0, Me, and 2000.
  - Macintosh 8.6, 9.x, and OS X.
- the print server is properly connected and a Print Server Configuration Page was printed and saved for reference. See page 5 for more information.
- the WLAN network interface card is properly installed on each computer using the print server and working correctly.
- each computer using the print server has either the HP *Network* or *Corporate User* driver (also known as the *Add Printer* driver) to install the printer. Printer drivers are available at **www.hp.com/support/printers**. You may also install the driver using the printer's CD-ROM.
- the WLAN access point is working correctly (infrastructure mode only).

The sequence for configuring the print server is different for the Windows and Macintosh operating systems. Follow the appropriate configuration sequence.

Windows

If configuring multiple print servers, remember that only one print server can be configured at a time.

1. Ensure that the computer is in **ad hoc mode**. Then set the following on the computer:
   - SSID (service set identifier): **hp**

     Note The SSID is case sensitive. Entering "HP" instead of "hp" will result in a communication failure.

   - WEP: **Disable**
2. From the DOS command prompt, use a **route ADD** command to establish a path from the computer to the print server. The print server's default IP address is 192.0.0.192, using 255.255.255.0 for the subnet and 255.255.255.255 for the gateway.

   Note Enter **ipconfig** to verify the computer's IP address. Use the route ADD command to establish a path. For example, for a computer IP address of 192.124.11.11, enter **route ADD 192.0.0.192 192.124.11.11**. If DHCP is enabled on the computer, allow two minutes for an IP address to be assigned.

3. Enter **192.0.0.192** as the URL in a browser to open the print server's Embedded Web Server.

   Note Disable the web proxy if one is being used on the computer.

4. In the Embedded Web Server, select the Wireless Settings option from the Configuration menu. Then perform the following steps:
   a. Set the print server to the desired **mode** (ad hoc or infrastructure).
   b. Set the print server **SSID** to match the SSID of the WLAN.
   c. If WEP security is in use, enable the **WEP Req** and enter the appropriate WEP key as specified by your network administrator.
5. If setting a special TCP/IP configuration (due to DHCP requirements or Access List restrictions, for example), open the TCP/IP Configuration page and enter the settings.
6. Apply the changes and reset the print server to activate changes by following either the dialog screens in the Embedded Web Server or selecting **Reset** from the menu.
7. Reconfigure the computer to match the mode of the print server, if necessary.
8. For each computer using the print server, insert the print server CD-ROM and select **Install** from the CD-ROM menu. Follow the on-screen instructions.

Macintosh

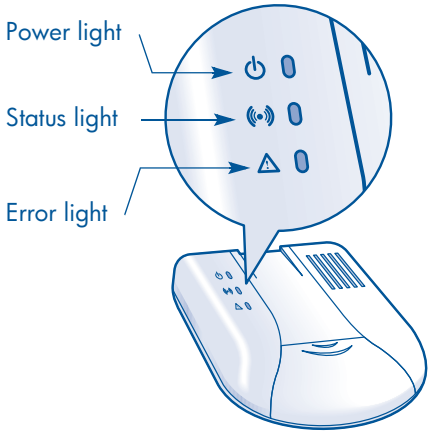
1. Ensure that the computer is set for **computer to computer** communications. Then open the AirPort menu and select the **hp** computer-to-computer network.
2. Ensure that AppleTalk is set to use AirPort.
3. Insert the print server CD-ROM. From the menu, open the appropriate **hp wp110 utility** for the operating system.
4. Use the utility to:
   – set the print server to the desired **mode** (computer to computer or AirPort Network).
   – ensure that the print server **SSID** matches the SSID of the WLAN.
   – enable the **WEP Req** and enter the appropriate Network Equivalent Password to activate the WEP feature, if appropriate.
   – **OS X Only** change the print server's IP address to match the subnet of the Macintosh configuring the print server.
5. When Wireless settings change, the Restart Print Server message appears.
   – If changing TCP/IP, AppleTalk or other settings, click Cancel and make changes before resetting the Print Server.
   – If not making changes to other settings, click **OK**.
   – **OS X Only** Establish TCP/IP settings.
6. Reconfigure the computer to match the mode of the print server, if necessary.
7. Run the Chooser to select the printer.

troubleshooting

This section offers solutions if you have problems printing with the print server.

understanding the print server lights

The three lights on the print server provide visual cues about the status of the print server.



if Power is...	if Status is...	if Error is...	then the print server is...
steady	blinking	off	processing information for the printer
steady	steady	steady	initializing
blinking simultaneously		off	printing a Print Server Configuration Page
blinking simultaneously			restoring the default settings
steady	off	blinking	experiencing an error with the internal Type II PCMCIA card. See "resetting the PCMCIA card" on page 9.
off	off	steady	experiencing an error. You must recycle the power. Disconnect the power cord from the print server, then reconnect it. If the problem persists, contact HP Customer Care (see page 11).

resetting the PCMCIA card

The print server contains a Type II PCMCIA card. To reset the card:

1. Unplug the power cord from the print server.
2. Remove the front cover of the print server.
3. Verify that the PCMCIA card is firmly inserted into the connector.

4. Plug the power cord into the print server.
5. Observe the lights and verify the initialization cycle is normal:
   a. All three lights turn on.
   b. All three lights turn off.
   c. The Power light turns on.
6. Replace the front cover.
7. After the print server completes its initialization cycle, print a Print Server Configuration Page.

printing a print server configuration page

Printing a Print Server Configuration Page verifies that the print server and printer are communicating properly (see page 4 for printing instructions). If the Print Server Configuration Page does not print:

1. Verify the following:
   – power and parallel cables are firmly connected
   – printer is turned on
   – PCMCIA card is securely installed
2. Print a Print Server Configuration Page.
3. If a Print Server Configuration Page does not print, see “contacting hp customer care” on page 11.

resetting the print server to factory default settings

If you have trouble configuring the print server, you may want to restore the factory default settings. The print server's default settings are:

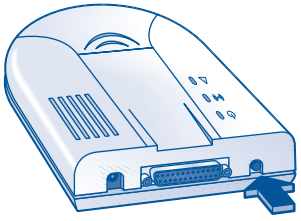
- Connection Mode: **ad hoc/computer to computer**
- Channel: **10**
- SSID: **hp**
- WEP: **Disable**
- Printer: *server name.printer name*

To return the print server to the default settings:

1. Unplug the power cord from the print server.

   Note Do not unplug the parallel cable from the printer.

2. Press and hold the **Test** button on the back of the print server.



3. While pressing the **Test** button, plug the power cord into the print server.
4. Continue to press the **Test** button until a Print Server Configuration Page begins to print.
5. Release the **Test** button.

   The print server resets to the default settings displayed on the Print Server Configuration Page.

contacting hp customer care

HP Customer Care's service and support provides expert advice on using or solving problems with the print server. There are several ways to obtain assistance—what you need, when you need it!

hp customer care e-support

hp customer care online

Go to the HP Website **www.hp.com/support/net_printing** for instant access to print server support information 24 hours a day, seven days a week.

hp user support forum

Go online to find helpful user forums — a great source of ideas and suggestions for using your print server. Go to **www.hp.com/go/forums** and select the print servers forum.

hp customer care by phone

HP provides telephone support free of charge during the phone support period for your print server. Highly trained technicians at our HP Customer Care Center are ready to take your call.

> **Note** Telephone fees are the responsibility of the caller. Rates may vary. Contact your local telephone company for current rates.

For HP Customer Care telephone numbers worldwide visit **www.hp.com/support/support_assistance** and select "call hp". In the USA, the HP Customer Care telephone number for HP Wireless products is: (208) 323-2551.

for this region...	use this phone number...
Canada	(905) 206-4663 or (800) 387-3867
France	+ 33 (0)1 43 62 34 34
Germany	+ 49 (0)180 52 58 143 (0.12 DM/30 sec. or EUR 0.06/30 sec.)
Italy	+ 39 02 264 10350
Spain	+ 34 902 321 123
United Kingdom	+ 44 (0)207 512 52 02
USA	(208) 323-2551

appendix

A Print Server Configuration Page provides important information about your print server (see page 5 for printing instructions). Below is an example of a print server's default settings.

```
**********************  Print Server Configuration **********************

   Mac Address             : 00C06F0396D3
   FLASH-ROM Version       : 0035
       Build Date          : 2001-07-16
   BOOT-ROM  Version       : 0090
       Build Date          : 2001-05-17

1. TCP/IP settings
    IP Address             : 192.168.2.200
    Subnet mask            : 255.255.248.0
    Default Gateway        : 192.168.2.1
    RARP                   : Disable
    BOOTP                  : Disable
    DHCP                   : Disable
    ARP + PING             : Enable
2. AppleTalk Settings
    Status                 : Enable
    Printer                : npi0396D3.LaserJet 1220
    Zone                   : (default zone)
3. SNMP settings
    Set Community Name     : (set)
4. Wireless settings
    Connection Mode        : Infrastructure
    WEP Request            : 40Bit Enable(Shared Key)
    SSID                   : iIPS-TM
    Fragmentation Thresh.  : 2346
    RTS Threshold          : 0
    Tx Rate                : Auto
    Country Code           : 2
5. Current Status
    Connection Status      : Connected(Infrastructure)
    Link Status            : Good
    Current Channel        : 3
    Parallel Port Mode     : ECP Mode
    Printer Manufacturer   : Hewlett-Packard
    Printer Model          : HP LaserJet 1220
6. Network Statistics
    Unicast Packets Rcvd.  : 3
    Total Packets Rcvd.    : 92
    Packets Transmitted    : 29

*****************************************************************************
END OF PRINTOUT
```

The Print Server Configuration Page lists the following information about your print server:

Mac Address — your print server's unique hardware number, the MAC (Media Access Control) address

FLASH-ROM — firmware version and date

BOOT-ROM — device boot code version

TCP/IP — the IP address and associated settings

AppleTalk Settings — a list of current AppleTalk settings

SNMP — shows whether SNMP community names (passwords) have been "Set"

Wireless Settings — WLAN settings in accordance with the IEEE 802.11b standard

Current Status — information about the attached printer and connectivity. Link Status shows the state of the last packet received

Network Statistics — network traffic statistics

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